PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:
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GRANDE BRETAGNE

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NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing

(day/month/year)

03.11.2004

Applicant's or agent's file reference ISH/P104001

1011/1/104001

International filing date (day/month/year)

Priority date (day/month/year)

PCT/GB 03/01586

International application No.

14.04.2003

16.04.2002

IMPORTANT NOTIFICATION

Applicant

FUTURA MEDICAL DEVELOPMENTS LIMITED

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:

D-10958 Berlin

amining authority: European Patent Office - Gitschiner Str. 103

Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840 Authorized Officer

Tsogka, P

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PATENT COOPERATION TREATY PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference ISH/P104001		FOR FURTHER	JRTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)			
International applica	ion No.	International filing da	ite (day/month/year)	
PCT/GB 03/0158	6	14.04.2003		16.04.2002	• .	
International Patent	Classification (IPC) or be	oth national classification	on and IPC			
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Applicant		· .				
FUTURA MEDIC	AL DEVELOPMEN	TS LIMITED				
1. This internat	onal preliminary exar	nination report has b	een prepared by	this International Preliminary Exam	ining	
Authority and	is transmitted to the	applicant according	to Article 36.			
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2. This REPOR	T consists of a total of	of 5 sheets, including	a this cover shee	t.		
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3. This report c	ontains indications re	lating to the following	g items:	•		
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_	ack of unity of inventi	•	o novelty, invent	ve step and industrial applicability		
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Ci	tations and explanati	ons supporting such	statement	overly, inventive step of industrial ap	·	
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VII 🗆 o	ertain defects in the i	nternational applicati	ion			
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/GB 03/01586

I. Basis	of the	re	port
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1. With regard to the elements of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):

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	Des	scription, Pages					•	
	1-6	•	as originally filed			• •	•	
							٠.,	
	Cla	ims, Numbers	•				• .	
	1-1	0	received on 13.10.200)4 with letter of 13	.10.2004			
2.	Wit lan	h regard to the langu guage in which the in	lage, all the elements marked a ternational application was filed	above were availal I, unless otherwise	ble or furnished to e indicated under	this Author this item.	ity in the	
	The	nese elements were available or furnished to this Authority in the following language: , which is:						
		• •	anslation furnished for the purp	•		nder Rule 23	.1(b)).	
		the language of pub	lication of the international app	lication (under Ru	le 48.3(b)).			
		the language of a tra Rule 55.2 and/or 55.	anslation furnished for the purp 3).	oses of internation	nal preliminary ex	amination (ι	ınder	
١.	Wit inte	h regard to any nucle rnational preliminary	eotide and/or amino acid sequexamination was carried out or	uence disclosed in the basis of the s	n the international sequence listing:	l application,	the	
		contained in the inte	rnational application in written	form.				
		filed together with th	e international application in co	mputer readable	form.		•	
		furnished subseque	ntly to this Authority in written fo	orm.		•		
		furnished subseque	ntly to this Authority in compute	r readable form.	• .	•		
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		The statement that the listing has been furn	he information recorded in conished.	puter readable fo	rm is identical to t	the written s	equence	
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٠.		the description,	pages:		*			
		the claims,	Nos.:					
		the drawings,	sheets:					
		This report has been been considered to	n established as if (some of) the go beyond the disclosure as file	e amendments had ed (Rule 70.2(c)).	d not been made,	since they I	nave	
		(Any replacement sl report.)	heet containing such amendme	nts must be referr	ed to under item	1 and annex	ed to this	
	Ado	litional observations.	if necessary:					

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/GB 03/01586

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

No: Claims

Inventive step (IS)

Yes: Claims

1-10

No: Claims

Industrial applicability (IA)

Yes: Claims

1-10

Industrial applicability (IA) Yes: Claims
No: Claims

2. Citations and explanations

see separate sheet

INTERNATIONAL PRELIMINARY **EXAMINATION REPORT - SEPARATE SHEET**



Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document:

D1: WO 02/00240 A (QUALILIFE PHARMACEUT INC) 3 January 2002 (2002-01-03)

D1 which is considered to represent the most relevant state of the art discloses (see page 7, lines 24-27) compositions and methods for treating females sexual response by administering to the vagina a vasodilator composition in combination with lubricant as a wet film or coating on the exterior surface of a male condom.

The subject-matter of claim 1 differs from this known D1 in that the vasodilator compound is disposed on the external condom surface in a form or within a composition which is immiscible with the lubricant.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as the translocation of the vasodilator active compound from the external surface of the condom when it is in its rolled-up state for packaging purposes (page 2, paragraph 1 of the application).

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

This solution is not obvious. None of the documents cited in the search reports hints to such a solution. Even though D1 discloses libraries of vasodilator active compounds (page 1, line 21 -page 6, line 23), of "pharmaceutically acceptable carrier" (also used as lubricants; page 8, line 14 - page 9, line 25) and pharmaceutical forms (page 6, lines 30 and 31) this document do not hint to a solution of claim 1, since the synergetic effect of using a combination of a vasodilator active compound which is immiscible with the lubricant is neither explicitly nor implicitly disclosed in D1.

Claims 2-10 are dependent on claim 1 and as such also meet the requirements of the PCT



EXAMINATION REPORT - SEPARATE SHEET

with respect to novelty, inventive step and industrial applicability.

Claims

- A condom having applied to its external surface a vasodilator active compound and being coated with a lubricant, characterised in that the vasodilator active compound is disposed on the external condom surface in a form or within a composition which is immiscible with the lubricant.
- 2. A condom according to claim 1, in which the vasodilator active compound is disposed towards the open end of the condom.
- 3. A condom according to claim 1 or claim 2, in which the active compound is applied as a composition which includes a carrier material with which the vasodilator compound is miscible but which will release the vasodilator active compound when in contact with body tissue.
- 4. A condom according to any preceding claim, in which the lubricant is buffered to a pH between 3 and 5.
- 5. A condom according to any preceding claim, in which the condom includes a textured or undulating region to the external surface.
- A condom according to claim 5, in which the textured or undulating region extends at least towards the open end of the condom and incorporates or includes the vasodilator active compound.
- 7. A condom according to claim 6, in which the textured or undulating region is formed from one or more layers of material including the material from which the condom itself is formed, the material of at least one such layer being miscible with the vasodilator and allowing the vasodilator to be absorbed by skin or tissue when brought in contact with the condom.
- 8. A condom according to any preceding claim, in which the vasodilator active compound is selected from nitrates, long and short acting alpha-adrenoceptor blockers, ergot alkaloids, anti-hypertensives, the prostaglandins and phosphodiesterase inhibitors optionally in combination with a skin penetration enhancer.
- 9. A condom according to claim 8, in which the vasodilator active compound comprises an organic nitrate applied as a layer or coating in a polar elastomer in solution, in the form of an aqueous dispersion of latex or by a hot melt or reactive process.
- 10. A condom according to any preceding claim, in which the active compound optionally together with a skin penetration enhancer is applied to the condom as a composition dispersed or dissolved in a gel carrier comprising a liquid medium and a thickening agent.